



PATENT
Atty. Docket No.: HYP-043 (4527/52)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Lu et al.
SERIAL NO.: 09/119,163 EXAMINER: Paschall
FILED: July 20, 1998 ART UNIT NO.: 3742
TITLE: ELECTRODE FOR A PLASMA ARC TORCH HAVING AN
IMPROVED INSERT CONFIGURATION

7/A
L.M.
5-13-99

Assistant Commissioner for Patents
Washington, D.C. 20231

AMENDMENT AND RESPONSE

This paper is submitted in response to the Office Action mailed from the Patent Office on
February 8, 1999.

AMENDMENT

In the Claims:

Please cancel claims 3 and 11, without prejudice.

Please amend claims 1, 6, 10, 18 and 29, and add new claims 34 - 40 as follows:

1. (Amended) An electrode for a plasma arc torch, the electrode comprising:
- an elongated electrode body formed of a high thermal conductivity material and having a
bore disposed in a bottom end of the electrode body; and
- a ring-shaped insert comprising a high thermionic emissivity material disposed in the bore,
the high thermionic emissivity material comprising hafnium or zirconium.